

**Knowing math can
win me money?!?!
(Or not knowing math can lose me money?)**



Find the square root of the following:

$$1) \sqrt{121}$$

11

$$2) -\sqrt{144}$$

-12

$$3) \sqrt{\frac{36}{49}}$$

$\frac{6}{7}$

$$4) \sqrt{640000}$$

800

81

81

160

160

ESTIMATE to the tenth.

$$5) \sqrt{35}$$

5.9

$$6) \sqrt{87}$$

9.7
9.5

$$7) \sqrt{26}$$

5.1

4² is "four squared." The square root of 16 is 4

$$4 \cdot 4 = 16 \quad \sqrt[2]{16} = 4$$

2³ is "two cubed." The cubic root of 8 is

$$2^3 = 8 \quad 2 \cdot 2 \cdot 2 = 8 \quad \sqrt[3]{8} = 2$$

So if the $\sqrt{100}$ is 10,
what do you think the $\sqrt[3]{64}$ is? 4

Find the CUBIC ROOT

1. $\sqrt[3]{27}$

2. $\sqrt[3]{125}$

3. $\sqrt[3]{216}$

+

()

$\sqrt{\quad}$

Order of Operations

•

a^3 ↙

—

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Add to your Math Dictionary . . .

Order of Operations

P

grouping symbols
parenthesis
square root
fraction bar

E

exponent

M

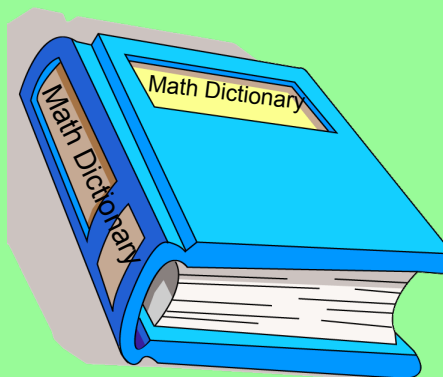
D

*multiplication & division
first from left to right*

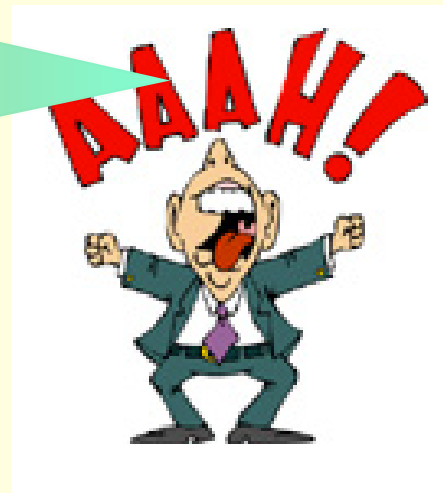
A

S

*addition & subtraction
first from left to right*



Common Mistakes to Avoid



1) $(4 \cdot 7) + 12 \cdot 3$

$$\begin{array}{r} 28 + 12 \cdot 3 \\ 28 + 36 \\ 64 \end{array}$$

$$72 \div 10$$

2) $\frac{9 \cdot 8}{100 \div 10} + 5$

$$\frac{72}{100 \div 10} + 5$$

$$\begin{array}{r} 72 \\ 10 \\ 7.2 + 5 \\ 12.2 \end{array}$$

3) $\frac{7 \cdot 10}{\sqrt{43+6}}$

4) $8^2 + \sqrt{19+6}$

$$\frac{7 \cdot 10}{\sqrt{49}}$$

$$\frac{7 \cdot 10}{7}$$

$$\frac{70}{7}$$

$$10$$

5)

$$\sqrt{\frac{19+8}{9-6}}$$

$$\sqrt{\frac{27}{9-6}}$$

$$\sqrt{\frac{27}{3}}$$

$$\sqrt{9}$$

$$3$$

6)

$$12 + 5\sqrt{8 \bullet 8}$$

$$12 + 5 \cdot \sqrt{64}$$

$$12 + 5 \cdot 8$$

$$12 + 40$$

$$52$$

Planner Time!

#9 p.184

#1-10

#14-19

Show ALL work!

